

**REMARKS**

Claims 1-4 and 12-22 remain for reconsideration. Claims 5-11 and 21-28 have been previously cancelled.

The Examiner rejected claims 1-4, 12 and 15-22 under 35 U.S.C. § 102(b), as being anticipated by the patent to Yoon et al. (EP 0413903A1). Contrary to the Examiner's assertion, Yoon does not teach "forming a waveguide between the two electrodes in the presence of the electric field, wherein the waveguide is formed in the plane of the two electrodes that is substantially parallel to a plane of the substrate" as previously recited in independent claims 1 and 12 and their respective dependent claims. However, to further distinguish, independent claim 1 and 12 have been amended to recite "...forming two electrodes on a substrate in a plane that is substantially parallel to a top surface surface plane of the substrate;..., wherein the waveguide is formed in the plane of the two electrodes that is substantially parallel to the top surface plane of the substrate" (emphasis added).

In support of the rejection, the Examiner asserted that the Yoon's Abstract and FIGS. 2 and 3 show such a recitation. However, it is clear from an observation of FIGS. 2 and 3 of Yoon that Yoon's waveguide is disposed between the electrodes in a stacked configuration. As a result, there is no plane

in Yoon's structure that is substantially parallel to the top surface plane of the substrate that also contains the waveguide and the electrodes. Furthermore, Yoon's Abstract says nothing about a planar arrangement of the waveguide and electrodes with respect to the substrate. The Applicant kindly requests the Examiner to provide a specific, detailed explanation of how Yoon meets such limitations, or to otherwise withdraw the rejection.

The Examiner rejected claims 1 and 12 under 35 U.S.C. § 102(b), as being anticipated by the patent to Komatsu et al. (U.S. 5,334,551).

The same arguments made with respect to the patent to Yoon likewise apply to the patent to Komatsu, namely that Komatsu only shows the waveguide and electrodes in a stacked configuration, however there is there is no plane in Komatsu's structure that is substantially parallel to a top surface plane of the substrate that also contains the waveguide and the electrodes. Furthermore, Komatsu's Abstract says nothing about a planar arrangement of the waveguide and electrodes with respect to the substrate. The Applicant kindly requests the Examiner to provide a specific, detailed explanation of how Komatsu meets such limitations, or to otherwise withdraw the rejection.

The Examiner rejected claims 13-14 under 35 U.S.C. § 103(b), as being unpatentable over Komatsu et al. (U.S. 5,334,551) in view of Jain et al. (6,221,565).

Again, as with Yoon and Komatsu, likewise the patent to Jain only

shows the waveguide and electrodes in a stacked configuration, however there is no plane in Jain's structure that is substantially parallel to a top surface plane of the substrate that also contains the waveguide and the electrodes. The Applicant kindly requests the Examiner to provide a specific, detailed explanation of how Komatsu and Jam, either alone or in combination, meet such limitations, or to otherwise withdraw the rejection.

The above features recited in the claims are not taught or suggested by the prior art of record. As such, it is respectfully requested that the outstanding rejections be withdrawn.

In view of the foregoing, it requested that the application be reconsidered, that claims 1-4 and 12-22 be allowed and that the application be passed to issue. Please charge any shortages and credit any overcharges to Intel's Deposit Account number 50-0221.

Respectfully submitted,

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